ABSTRACT OF THE DISCLOSURE

A GaN layer is formed on a sapphire substrate through an AlN buffer layer and doped with Mg to prepare a laminate (referred to as "GaN substrate"). A metal (Pt and Ni) electrode 50 nm thick is formed on the GaN substrate by (1) vapor deposition after the GaN substrate is heated to a temperature of 300°C or by (2) vapor deposition while the GaN substrate is left at room temperature. (3) The electrode obtained in (2) is heated to 300°C in a nitrogen atmosphere. The contact resistance of the electrode obtained in (1) is lower by two or three digits than that of the electrode obtained in (2) or (3). That is, the electric characteristic of the electrode obtained in (1) is improved greatly.